FIGURE 1

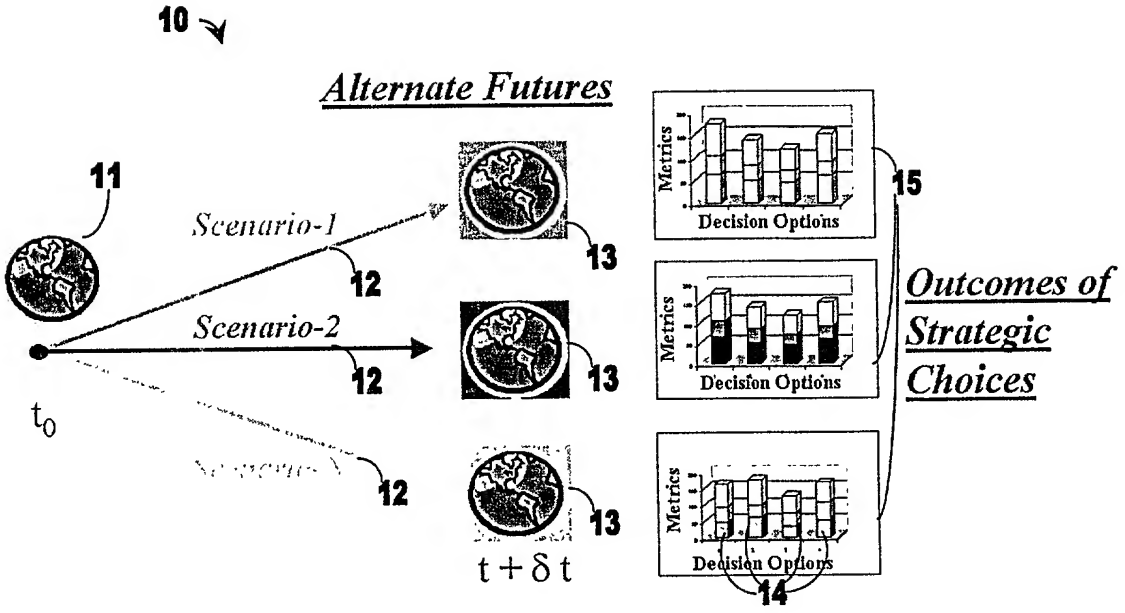


FIGURE 1A

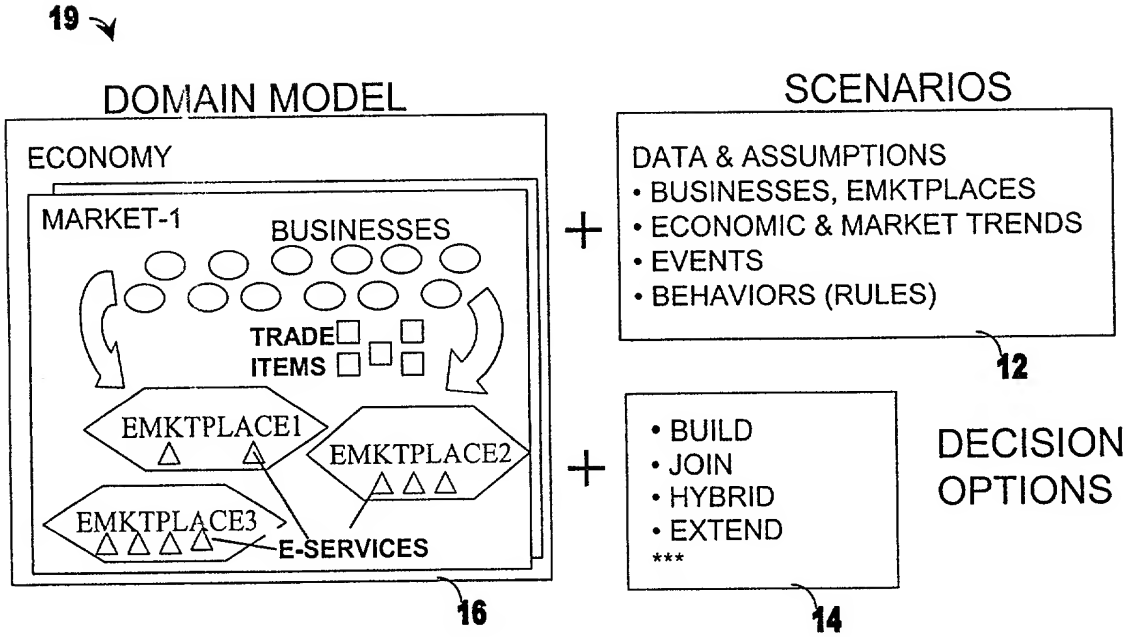


FIGURE 2

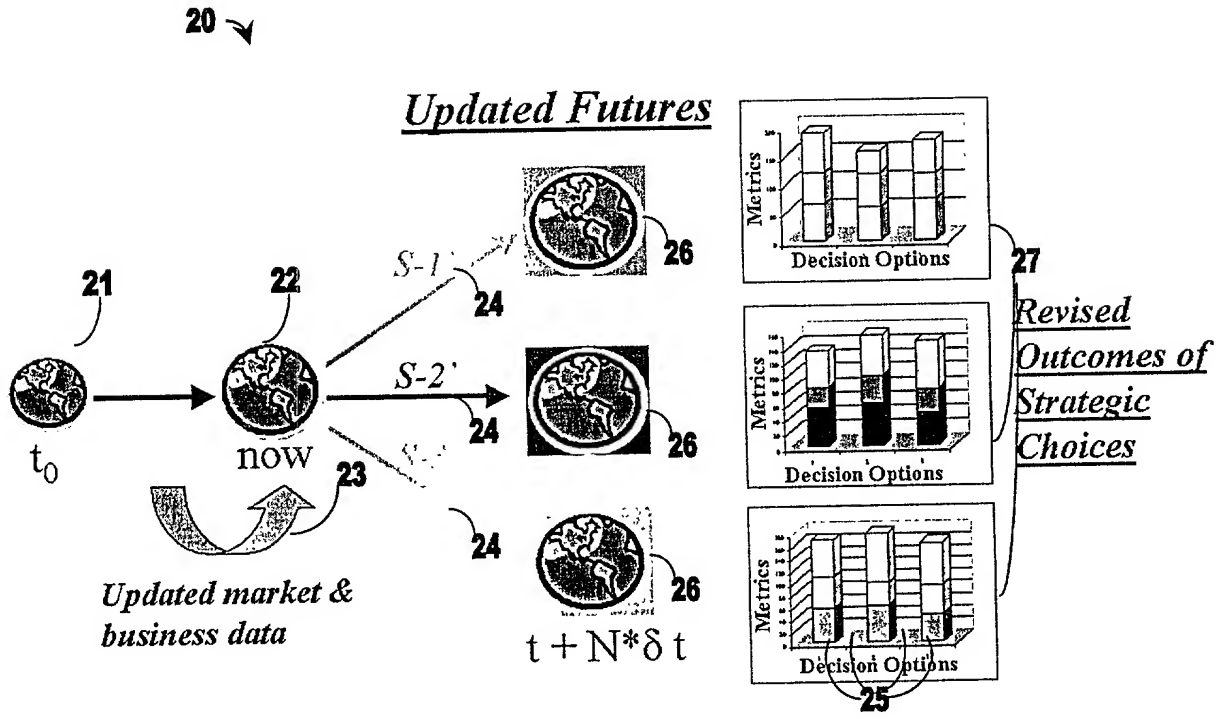


FIGURE 3

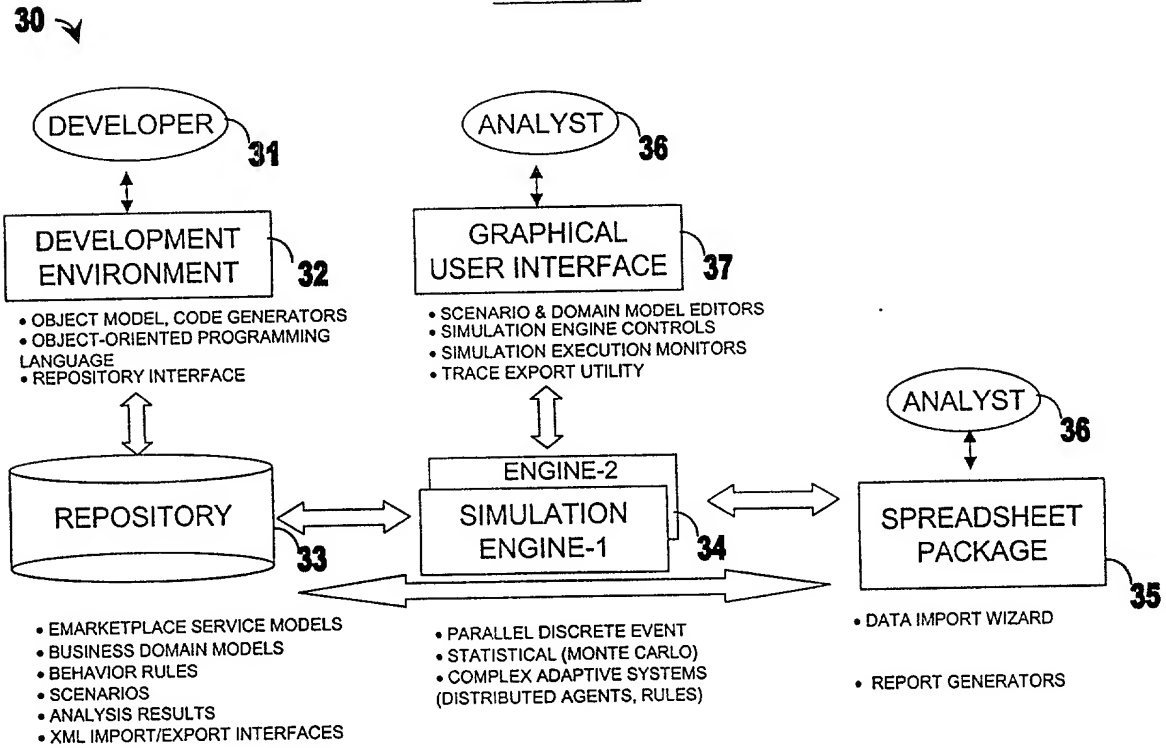
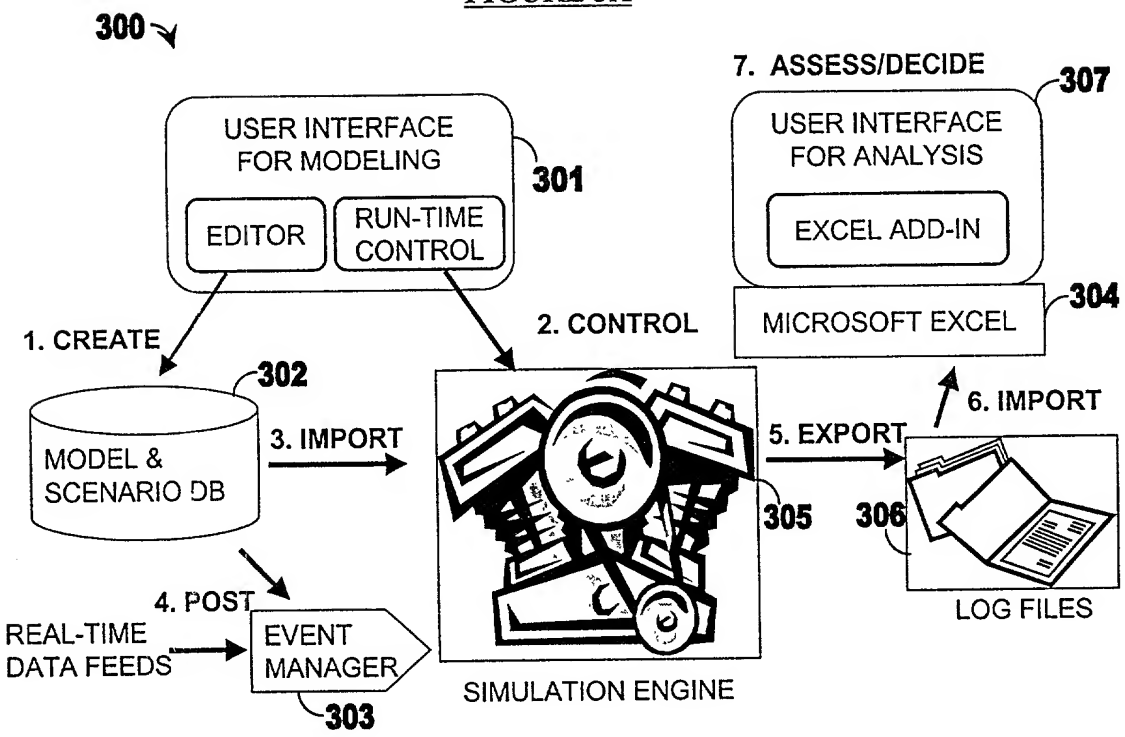


FIGURE 3A



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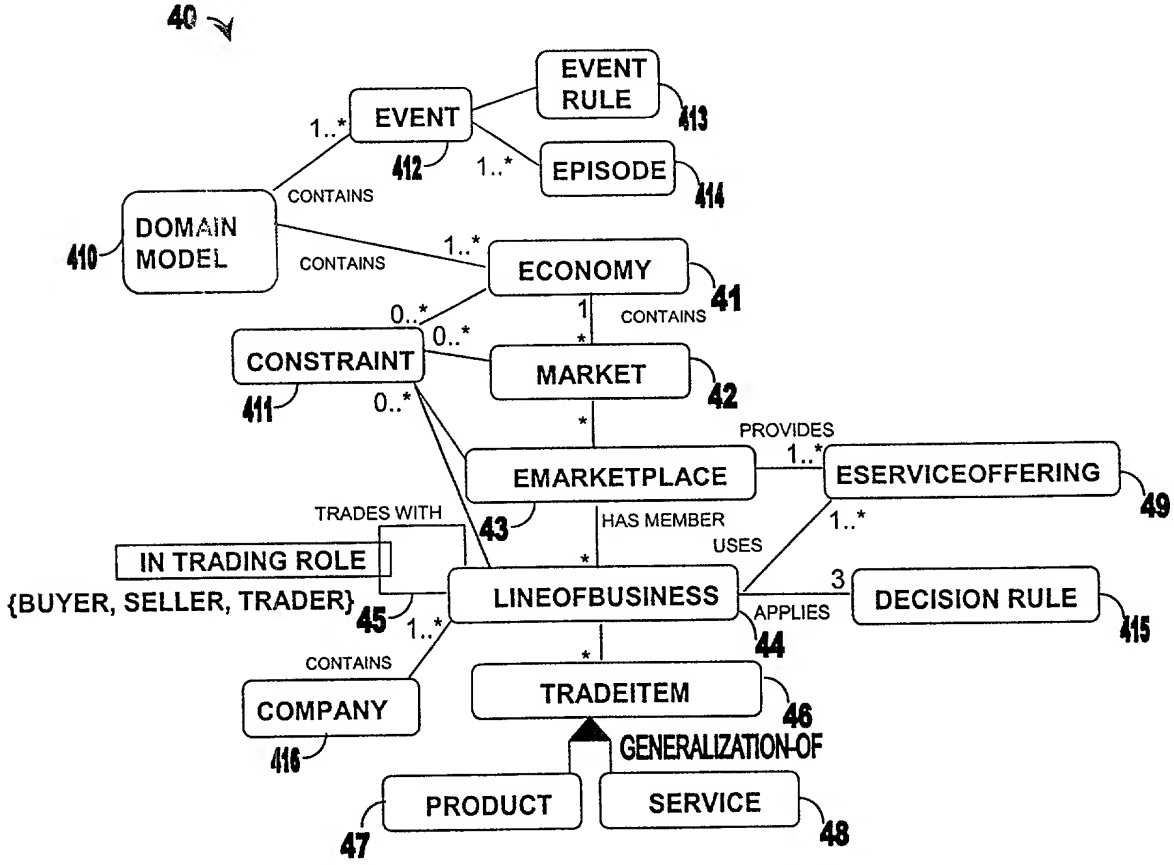

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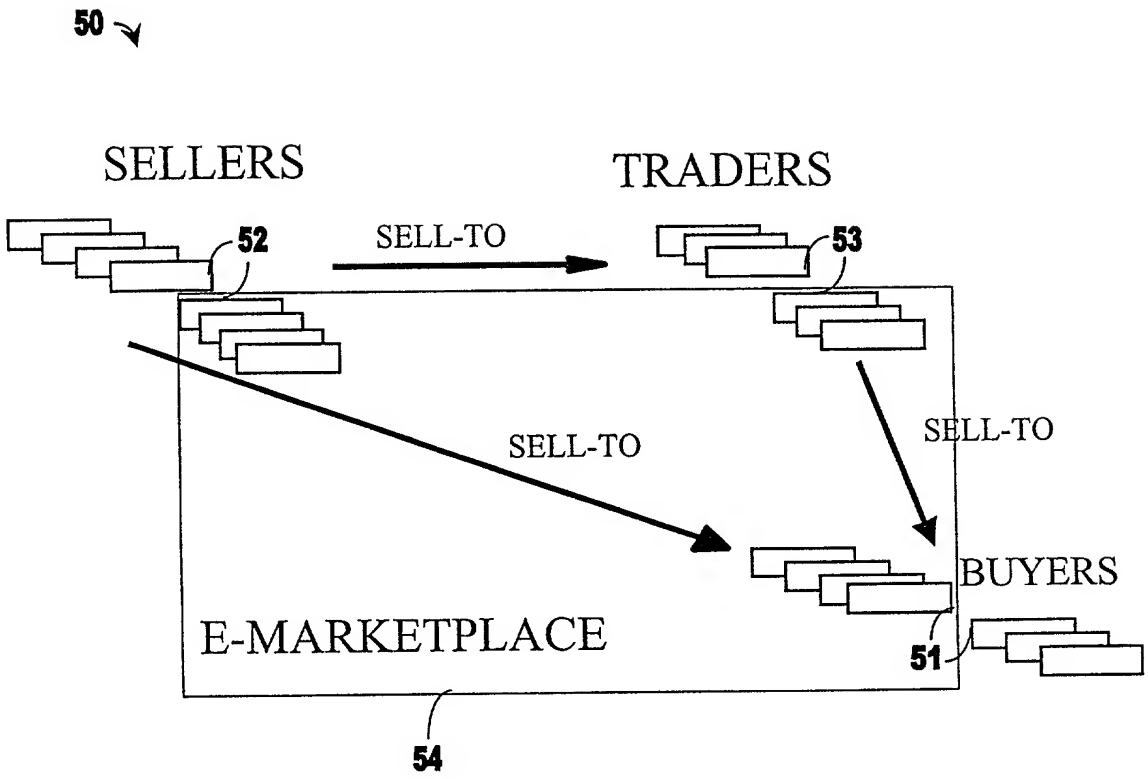
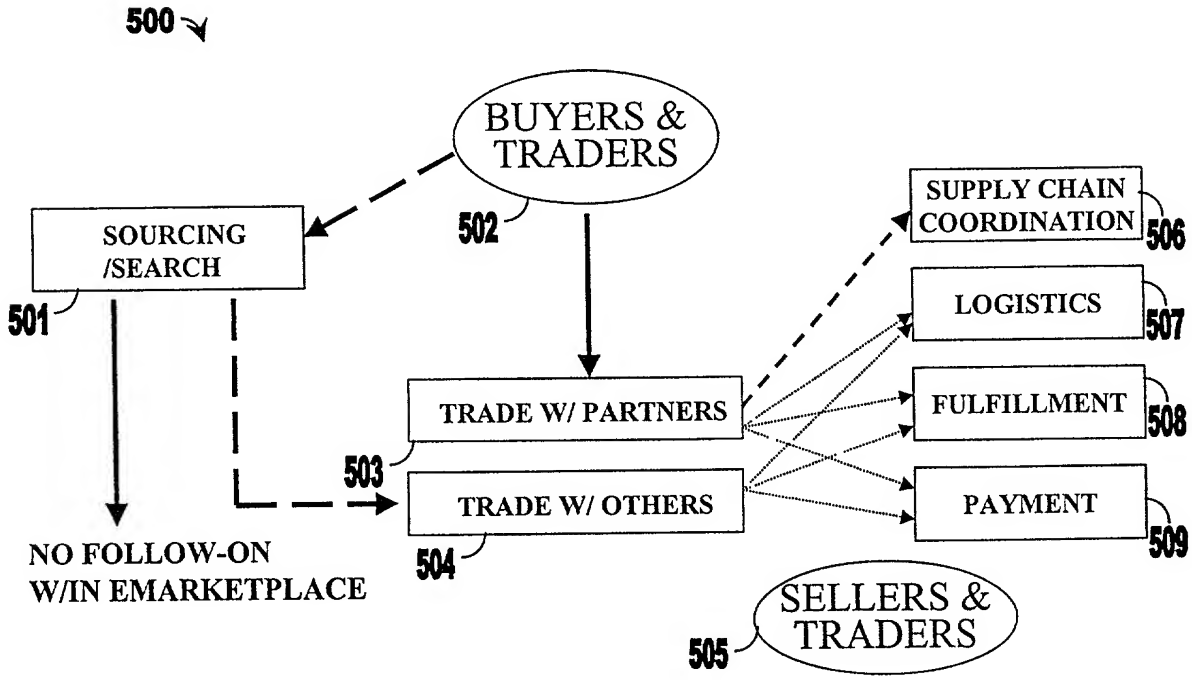


FIGURE 5A



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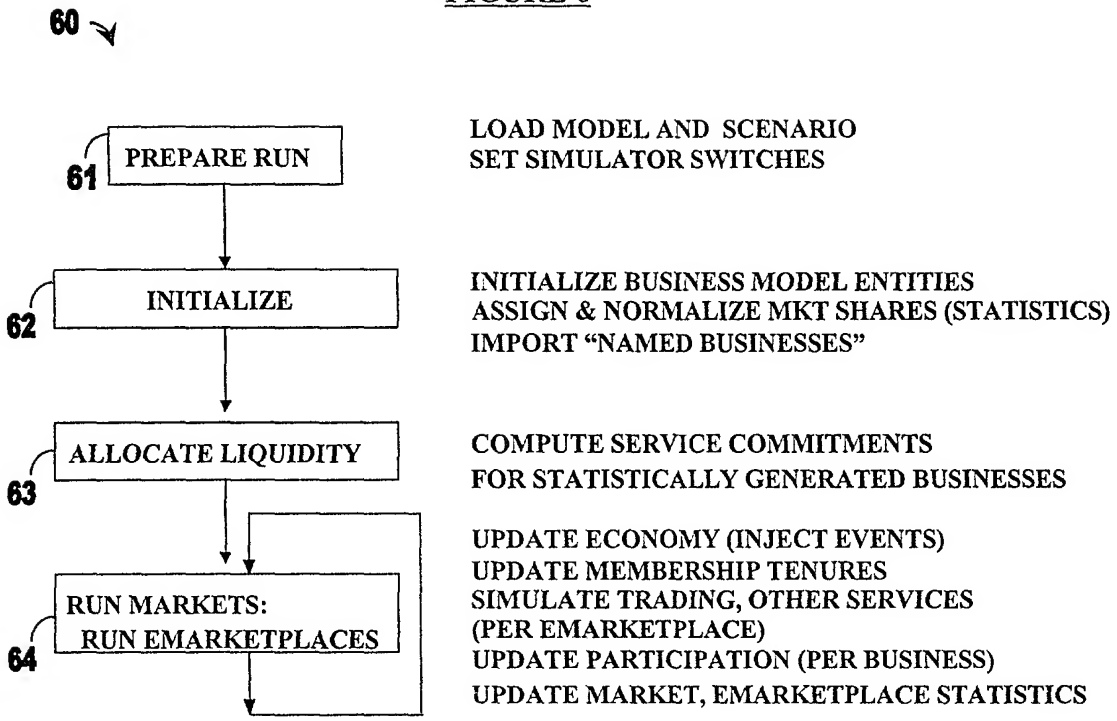

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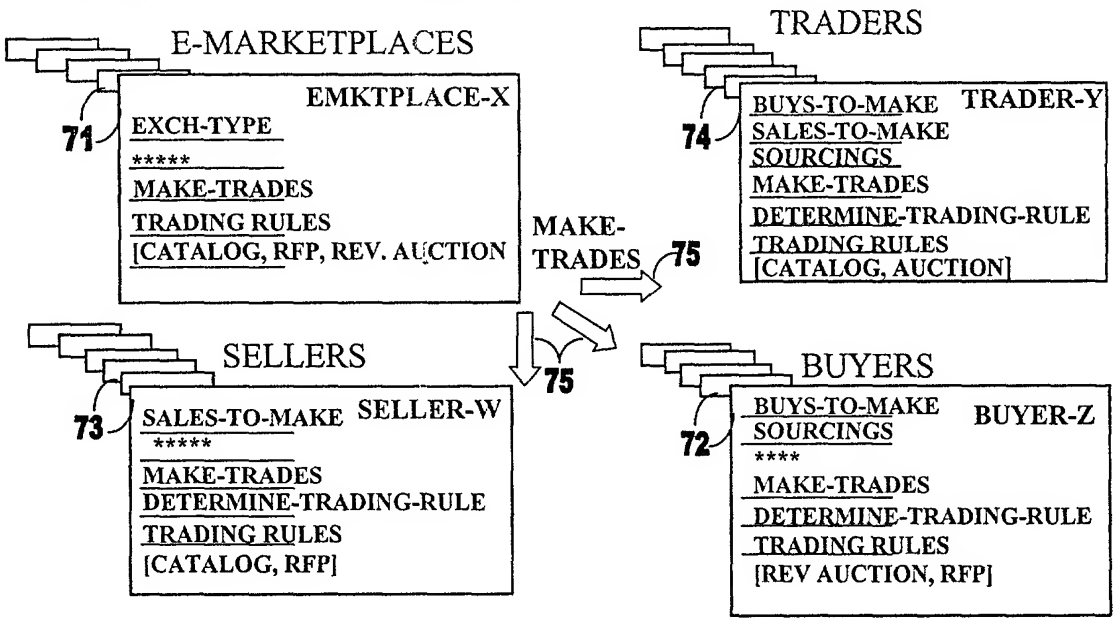

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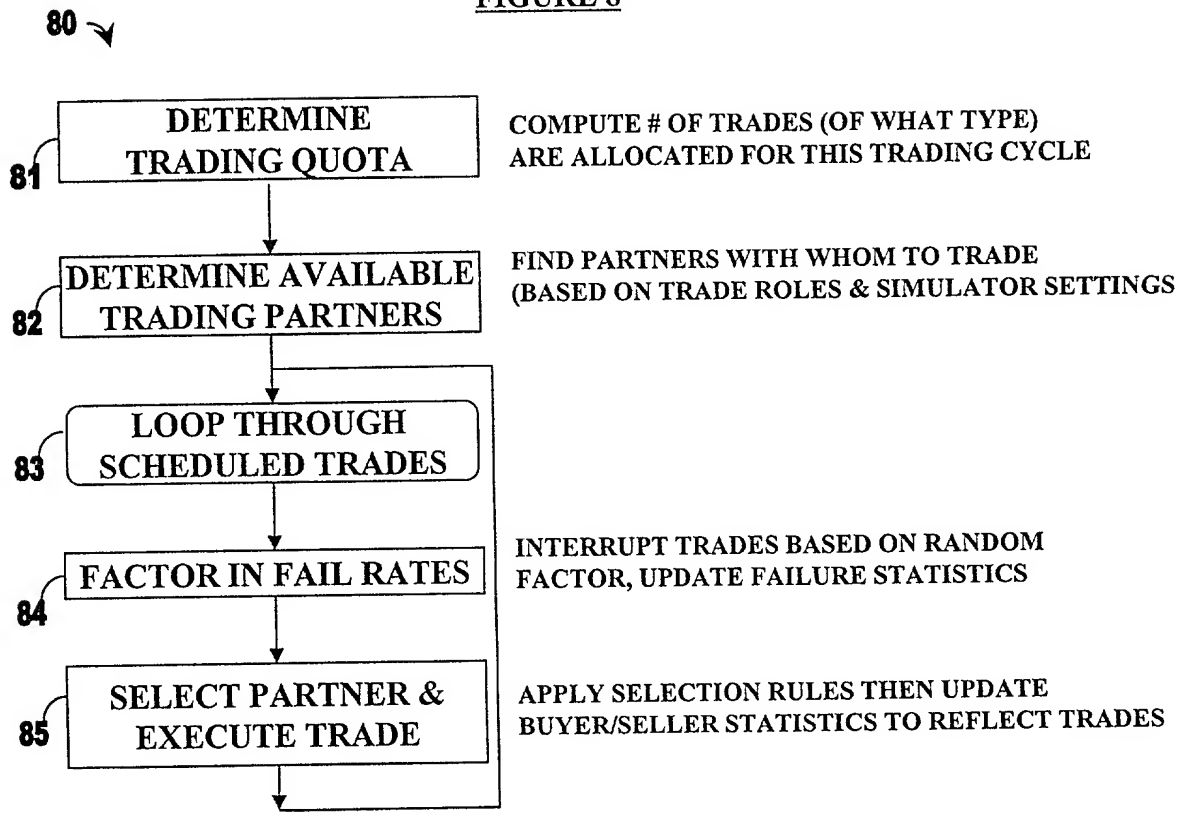


FIGURE 9

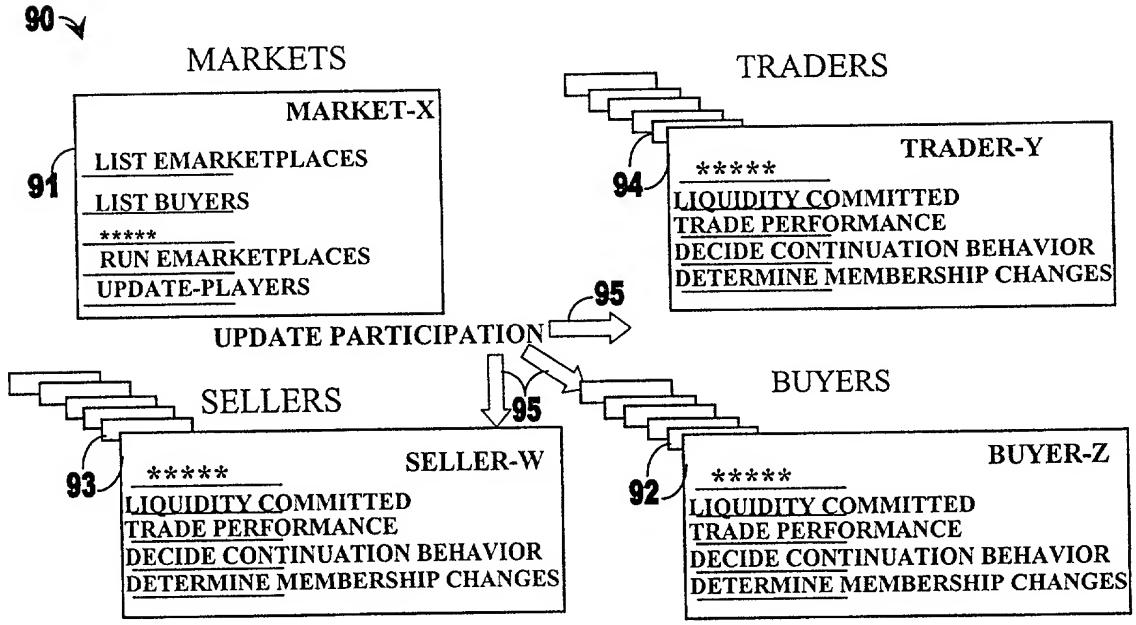


FIGURE 9A

Rules that (Simulated) Businesses apply to change their levels of participation in Exchanges

900

E-MARKETPLACE SERVICES			
DECISION OPTIONS	CURRENTLY SUBSCRIBED	AVAILABLE BUT NOT USED	NEWLY ADDED
NO CHANGE	X	X	X
INCREASE PARTICIPATION	X		
DECREASE PARTICIPATION	X		
SUBSCRIBE (AT SOME LEVEL)		X	X
WITHDRAW FROM EMKTPLACE	X	X	X

FIGURE 9B

Rules that (Simulated) Businesses apply to decide whether or not to join Exchanges

901

DECISION FACTORS	**VALUES**	**WEIGHTS**
MEMBERSHIP LEVELS		
TRADING LIQUIDITY		
CONTENT		
COMMERCE		
COLLABORATION		
COMMUNITY		
CUST REL. MGMT		
OTHER MODEL PARAMETERS		
DECISION FUNCTION = F(VALUE-X * WEIGHT-X		

DECISION OPTIONS
JOIN
RESULT < = THRESHOLD
NO CHANGE (DON'T JOIN)
RESULT > THRESHOLD

FIGURE 10

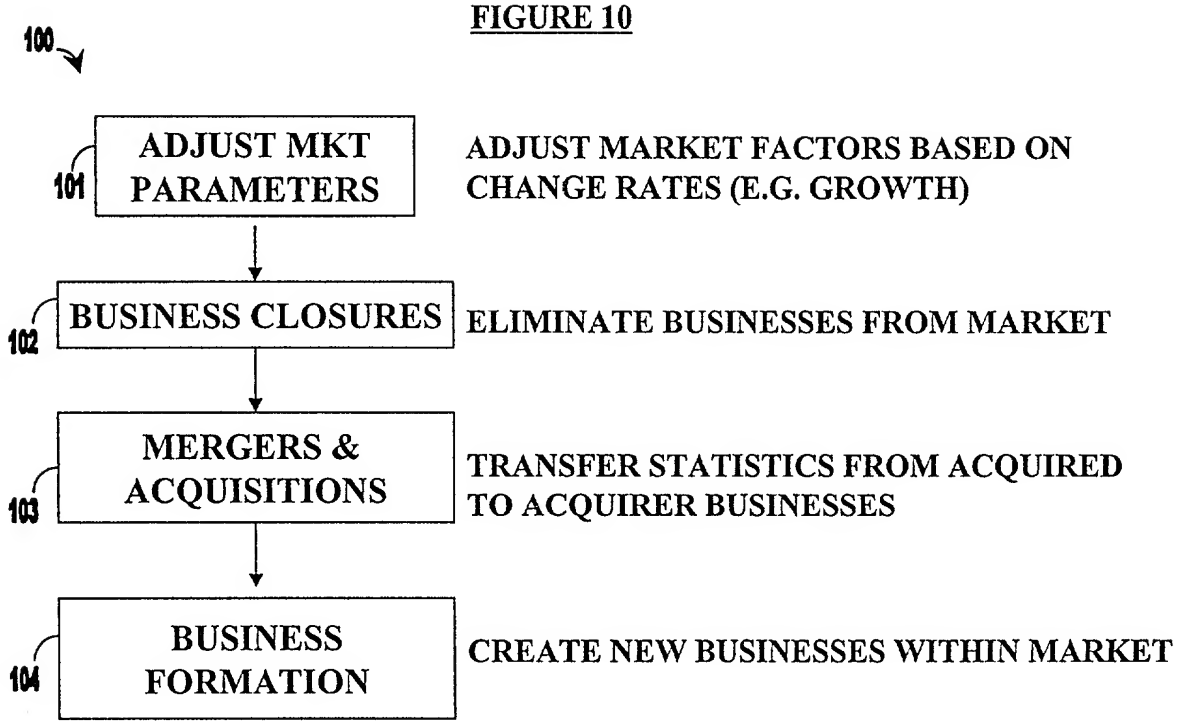


FIGURE 11

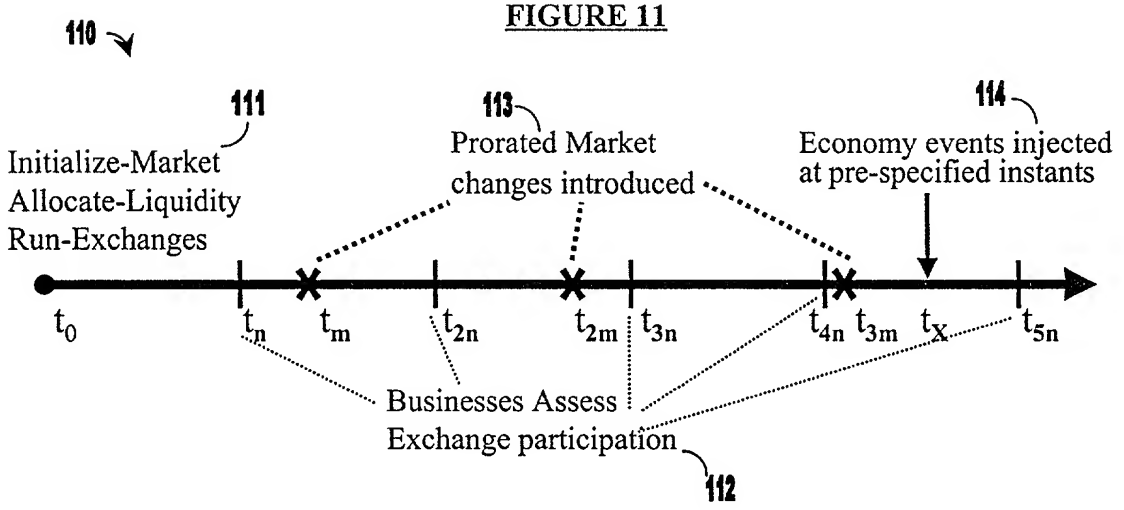


FIGURE 12

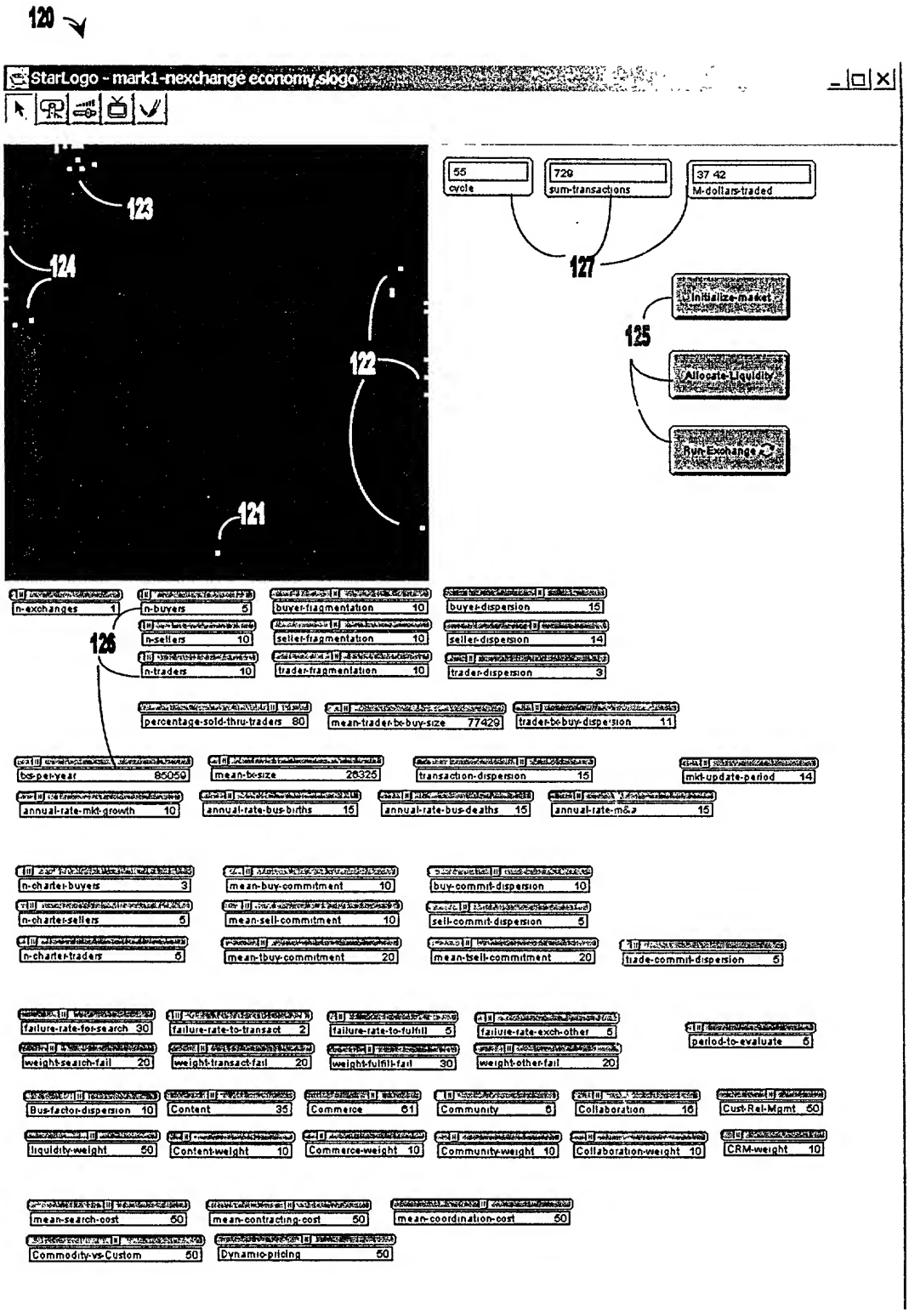

120
StarLogo - mark1-nexchange economy.slogo
123
124
122
121
55
cycle
729
sum-transactions
37 42
M-dollars-traded
127
Initialize-market
125
Allocate-Liquidity
Run Exchange
126
n-exchanges 1
n-buyers 5
n-sellers 10
n-traders 10
buyer-fragmentation 10
seller-fragmentation 10
trader-fragmentation 10
buyer-dispersion 15
seller-dispersion 14
trader-dispersion 3
percentage-sold-thru-traders 80
mean-trader-bc-buy-size 77429
trader-bc-buy-dispersion 11
bs-per-year 86059
mean-bc-size 26325
transaction-dispersion 15
mkt-update-period 14
annual-rate-mkt-growth 10
annual-rate-bus-births 15
annual-rate-bus-deaths 15
annual-rate-m&a 15
n-charter-buyers 3
n-charter-sellers 5
n-charter-traders 6
mean-buy-commitment 10
mean-sell-commitment 10
mean-tbuy-commitment 20
buy-commit-dispersion 10
sell-commit-dispersion 5
mean-tsell-commitment 20
trade-commit-dispersion 5
failure-rate-for-search 30
failure-rate-to-transact 2
failure-rate-to-fulfill 5
failure-rate-exch-other 5
weight-search-fail 20
weight-transact-fail 20
weight-fulfill-fail 30
weight-other-fail 20
period-to-evaluate 6
Bus-factor-dispersion 10
Content 35
Commerce 61
Community 6
Collaboration 16
Cust-Rel-Mgmt 50
liquidity-weight 50
Content-weight 10
Commerce-weight 10
Community-weight 10
Collaboration-weight 10
CRM-weight 10
mean-search-cost 50
mean-contracting-cost 50
mean-coordination-cost 50
Commodity-vs-Custom 50
Dynamic-pricing 50

FIGURE 13

130

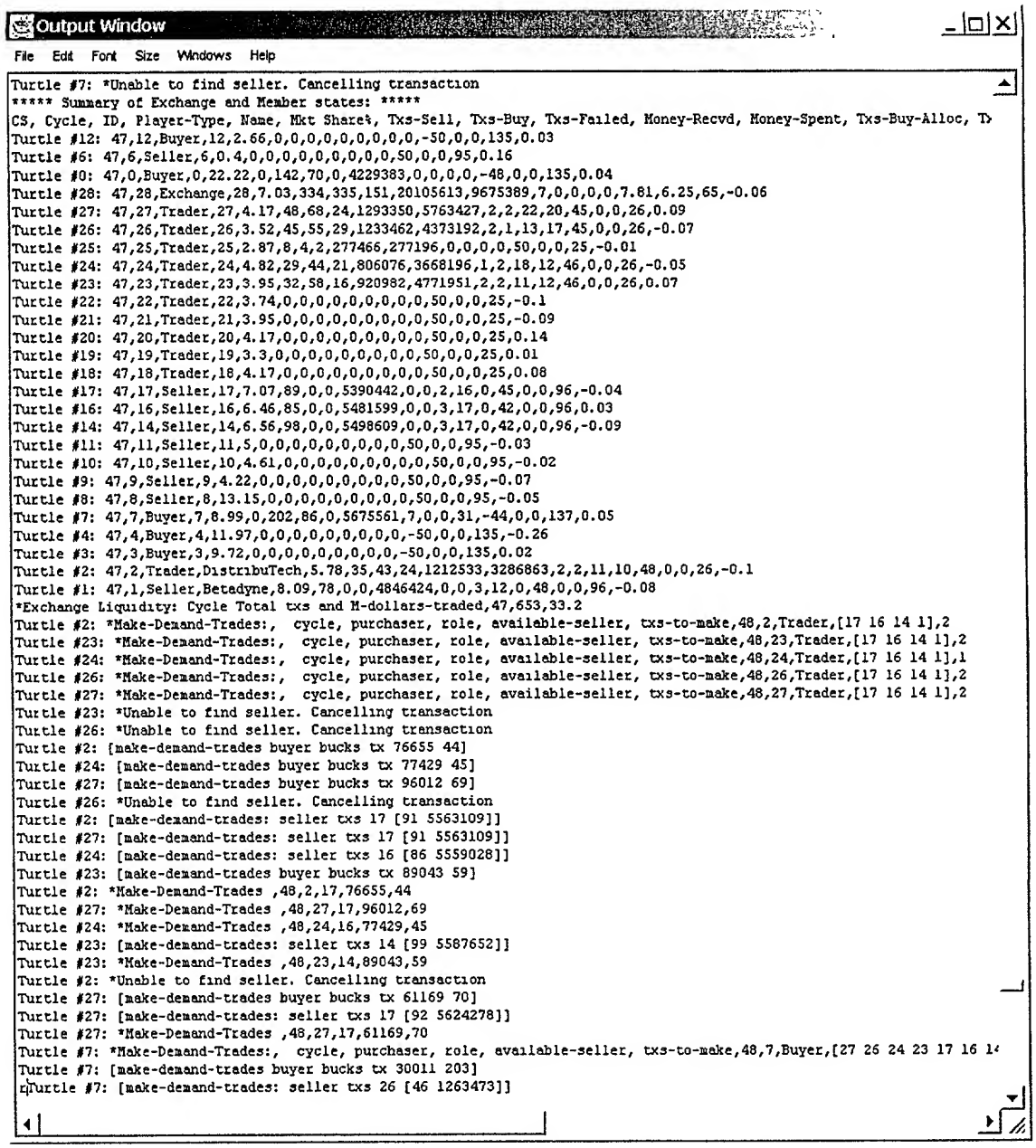


FIGURE 14

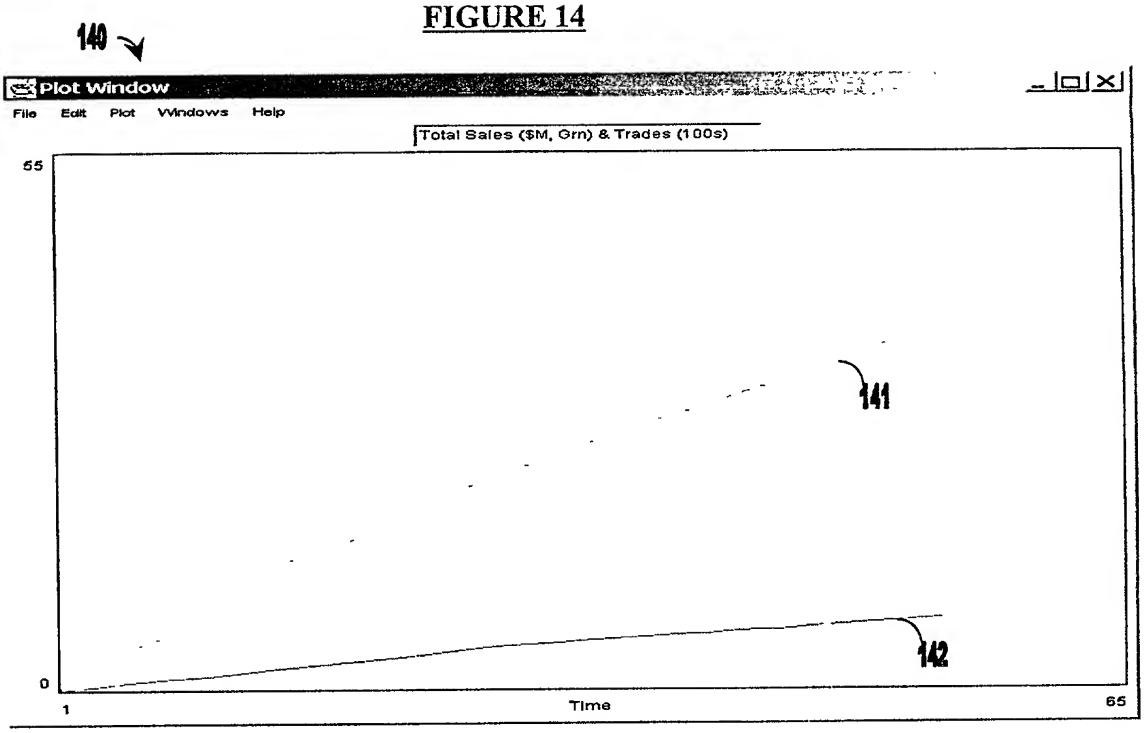


FIGURE 15

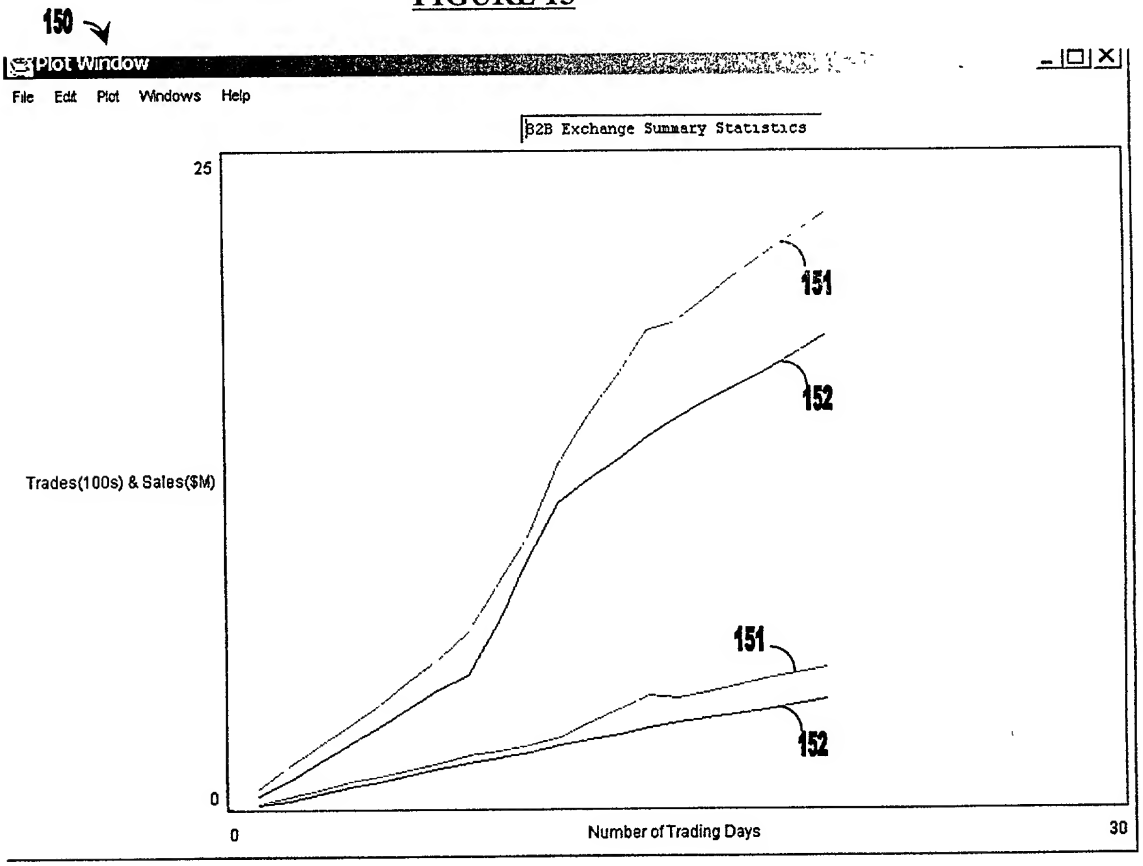
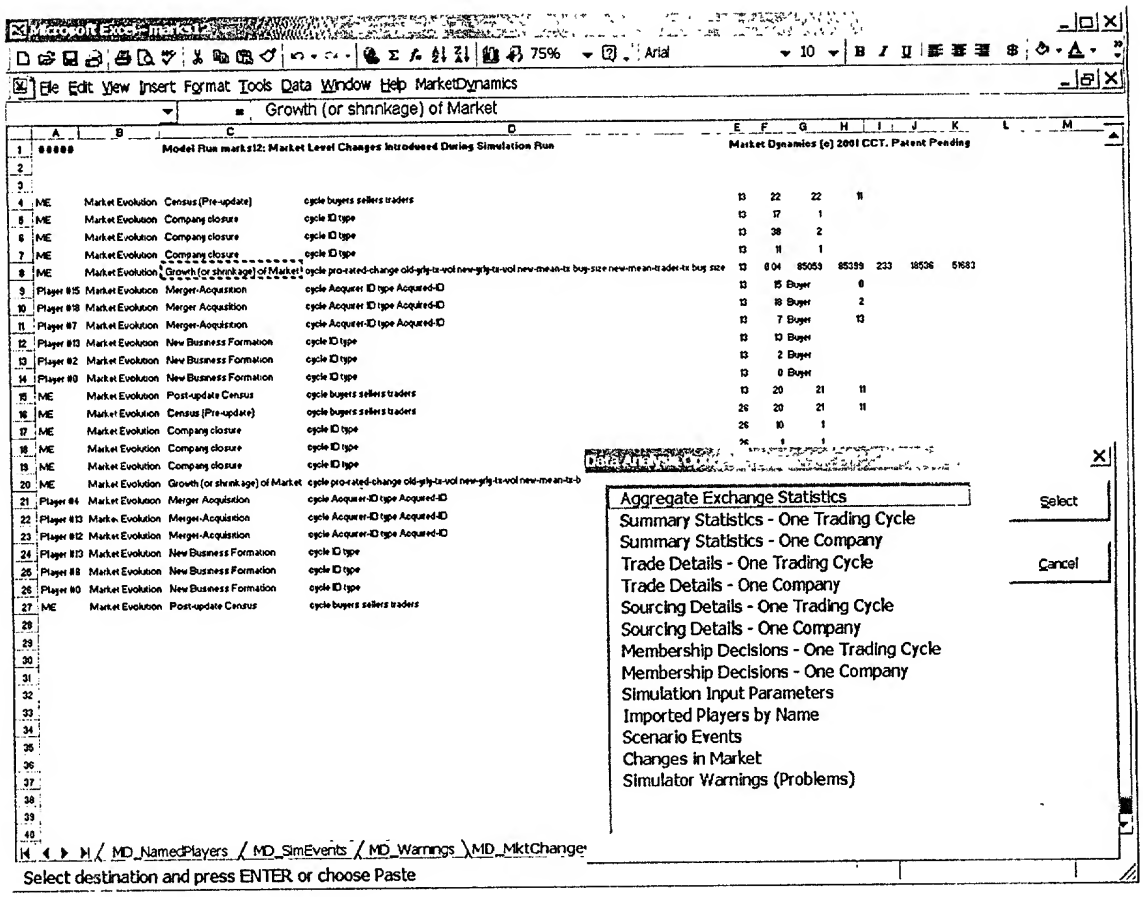


FIGURE 16

160